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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,648	06/18/2001	Lisa R. Etzel	P04887US0	1835
22885	7590	03/22/2004	EXAMINER	
MCKEE, VOORHEES & SEASE, P.L.C. 801 GRAND AVENUE SUITE 3200 DES MOINES, IA 50309-2721			WINSTON, RANDALL O	
			ART UNIT	PAPER NUMBER
			1654	

DATE MAILED: 03/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary

Application No.

09/883,648

Applicant(s)

ETZEL ET AL.

Examiner

Randall Winston

Art Unit

1654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 44-81 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 44-81 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>0303</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 44-81 in applicant's response to the restriction requirement of 12/22/2003 is acknowledged.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 44-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peyrouset et al. (US 4,436,658) in view of Nuyens et al. (US 5,919,913), Kitamura et al. (US 6,428,812) and Meiji Milk Prod Co. LTD (Derwent 1987-01027, abstract).

Applicant claims a method of making a whey protein isolate from casein-free whey comprising: adjusting the pH of the whey to between 6.0 to 8.0, treating the whey with silica to remove lipids, centrifuging the whey/silica mixture to produce a clear whey feedstream, further removing lipids from the whey feedstream by dialyzing, adjusting the pH of the whey feedstream to between 4.6 and 4.8, centrifuging the whey feedstream to further remove the lipids, and to remove complexed and denatured proteins and filtering the whey feedstream to remove any remaining small molecules to produce a whey protein isolate.

Peyrouset et al. teach (see, e.g. abstract, column 1 lines 47, column 2 lines 22-64, column 3 lines 17-24, example 1 and claim 1), a method of making a whey protein isolate (i.e. lactoferrine and/or immunoglobulins) from casein-free whey comprising adjusting the pH of the whey obtained from milk of humans, sheep or cattle in a basic solution to between 7.7 to 8.8, and treating the whey with silica to produce a purified whey protein isolate.

Peyrouset et al. teach the claimed invention with the exception of using other purification methods such as centrifuging, dialyzing and lowering the pH of the solution to produce a more purified whey protein isolate.

Nuyens et al. beneficially teach (see, e.g., column 9 lines 30-35) the purification method of centrifuging the whey to produce a more purified whey.

Kitamura et al. beneficially teach (see, e.g. example 1 lines 20-24) the purification method of dialyzing the whey to produce a more purified whey.

Meiji Milk Product Co. beneficially teach (see, e.g., Derwent abstract) the purification method of placing whey within an acidic pH solution (i.e. a pH around 4.2) to produce a more purified whey.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Peyrouset et al.'s teachings and to include the beneficial teachings of Nuyens et al., Kitamura et al. and Meiji Milk Product Co., because the above combined teachings would create an improved method of preparing a more purified whey protein isolate. The adjustment of these and other conventional working conditions (e.g. pH adjustments, whey and/or silica substitutions, filtering the whey

mixture, and how whey is obtained), are deemed merely a matter of judicial selection and routine optimization which is well within the purview of the skilled artisan.

Accordingly, the invention as a whole was prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Winston whose telephone number is 571-272-0972. The examiner can normally be reached on 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brenda Brumback can be reached on 571-272-0961. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


BRENDA BRUMBACK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600

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